

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 05-271056  
(43)Date of publication of application : 19. 10. 1993

---

(51) Int. Cl. A61K 9/70  
A61K 9/70  
A61K 9/70  
A61K 31/34  
A61K 31/415  
A61K 31/565  
A61K 47/02

---

(21)Application number : 04-102166 (71)Applicant : HISAMITSU PHARMACEUT CO INC  
(22)Date of filing : 27. 03. 1992 (72)Inventor : NAKAGAWA AKIRA  
HIRANO MUNEHICO  
MEYA TATSUYA

---

(54) CONTROLLED POWDERY AGENT FOR TRANSCUTANEOUS ADMINISTRATION

(57)Abstract:

PURPOSE: To obtain an agent for transcutaneous administration suitable for the continuous delivery of a systemic drug by adding a systemic drug and fine powder as essential components to a pressure-sensitive tacky adhesive base.

CONSTITUTION: A pressure-sensitive tacky adhesive base widely used in general is compounded with a systemic drug (preferably clonidine, estradiol, isosorbitol nitrate, etc.) and fine powder insoluble in the adhesive base, essentially resistant to the impregnation of the drug and having particle size of  $\approx 80\mu\text{m}$  (preferably titanium oxide, silica or aluminum silicate) as essential components. The amount of the fine powder to be compounded to the base is preferably 10-30%. The tacky adhesive to be used in the tacky adhesive base is a thermoplastic elastomer (e.g. styrene-isoprene-styrene block copolymer), an acrylic adhesive, a silicone-based adhesive or a polyisobutylene-based adhesive. The start of the drug release and the adhesiveness to the skin can be improved by using a tacky adhesive layer having a double-layer structure consisting of a powder-containing tacky adhesive layer kept from contact with skin and a powder-free tacky adhesive layer contacting with skin.

---

LEGAL STATUS

[Date of request for examination] 10. 12. 1997  
[Date of sending the examiner's decision of rejection] 20. 06. 2000  
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]	
[Patent number]	3178891
[Date of registration]	13. 04. 2001
[Number of appeal against examiner's decision of rejection]	2000-10742
[Date of requesting appeal against examiner's decision of rejection]	13. 07. 2000
[Date of extinction of right]	

Copyright (C); 1998, 2003 Japan Patent Office